

Appl. No.: 09/774,999
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Reply to Office Action of: April 29, 2004

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REMARKS/ARGUMENTS

In response to the Examiner's objection to the specification, applicants have amended the specification at page 1 to include the serial numbers of the related applications.

Applicants have also amended the specification to correct several typographical errors. In addition, applicants have amended Figure 4 such that element 116 is now 116' for consistency with the specification. A clean copy of Figure 4 is attached hereto.

The Examiner rejected priorly presented claims 1-11, 13-15, and 19-25 as unpatentable, 35 USC 103(a), over Nuutinen, patent application US 2002/0129236 A1, December 12, 2002 (hereinafter Nuutinen) in view of Moore et al., patent application 2002/0021465 A1, February 21, 2002 (hereinafter Moore) in view of Gawargy et al., patent application US 2002/0141381, October 3, 2002 (hereinafter Gawargy). In response thereto, applicants' have amended 1 to clarify that the networked appliance is a "home" networked appliance and amended claim 1 to include the limitations of claim 2 such that claim 1 now recites that the command message has the connection established phased removed such that no session is established between the UAC processor and UAS processor. Accordingly, applicants have canceled claim 2. In accordance with the changes to claim 1, applicants have also cancelled claim 5 and amended claim 13. Applicants have also amended claims 8 and 23 to recite, similar to claim 1, that no session is established between the UAC processor and UAS processor. Applicants have further amended claim 23 to recite the UAS processor is associated with a least two network appliances and that the UAS maps the URL of received command message to at least one of these appliances. Applicants have amended claim 24 in accordance with the changes made to claim 23. Lastly, applicants have cancelled claims 10-11, 14-15, 19-21, and 25 to expedite the prosecution of this application.

Applicants' invention allows users to remotely send instructive commands to home networked appliances and to receive status information from these appliances using a modified SIP (session initiated protocol) network. Specifically, as recited by amended claim 1, applicants' invention is a SIP system for communicating between a SIP user agent client (UAC) processor and a home networked appliance where instructions specific to the appliance are placed in SIP command messages and conveyed from the UAC processor to a SIP user agent server (UAS) processor that interfaces with the appliance and translates the SIP commands for the appliance. Importantly, the SIP command messages have the connection establishment phase removed such that no session is established between the UAC processor and the UAS processor. Specifically, SIP was originally developed for creating, modifying and terminating interactive communication sessions between one or more points.

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(Specification, page 3, lines 1-9). Applicants' invention modifies SIP to specifically control network appliances thereby not requiring a corresponding session be established.

Turning to the teachings of Nuutinen, Moore, and Gawargy, Nuutinen teaches the original intention of SIP, a "signaling protocol for creating, modifying, and terminating multimedia sessions" between end systems and most significantly, is directed at using SIP to establish telephony sessions between end points. (Nuutinen, paragraphs 2-5 and 38-93). Moore teaches a home networking gateway (HFG) that provides interworking functionality between a hybrid fiber coaxial (HFC) network and home devices, the HFG translating between the protocols used on the HFC network and the protocols used on the home network. (Moore, paragraphs 9-10 and 34). Significantly, Moore also focuses on telephony applications and in particular, describes a voice over packet example where the MGCP signaling protocol (the MGCP protocol is conceptually similar to SIP) is used to establish telephony sessions over the HFC network to a telephony device in the home network. Here, MGCP signaling occurs over the HFC network to the HFG and the HFG then converts MGCP to a home networking protocol for communicating with a telephony device in the home network. (Moore, paragraphs 41-45; Figures 6 and 7).

Gawargy is directed at telephony services deployed in a broadband packet network and in particular, is directed at enabling "IN/AIN functionality for telephony services deployed in [a] broadband packet network." (Gawargy, paragraphs 6 and 34). Specifically, Gawargy teaches a broadband network where telephony sessions can be established between media gateway controllers (MGC) and where an application server (AS), which is part of the telephony infrastructure, enables IN/AIN telephony functionality for these sessions. Here, a MGC uses SIP to convey INAP and TCAP query/response transactions between the MGC and the AS. (Gawargy, paragraphs 33, 34, and 53).

The obvious combination of these three teachings is an application server (AS) as taught by Gawargy combined with an HFC network as taught by Moore (e.g., Moore Figure 3) where the AS is connected to the PSTN 18 or IP Network 20 of the Moore network. The combination of Nuutinen and Moore is the use of SIP to establish telephony sessions over the HFC network to home devices. Here, similar to MGCP, SIP signaling would occur over the HFC network and the HFG would then convert this SIP signaling to a home networking protocol for controlling a telephony device and to establish a corresponding session to this device. The AS of Gawargy would add IN/AIN telephony functionality to this session. However, this combination is not applicants' invention as recited by amended claim 1.

Nuutinen and Moore arguably teach the use of SIP commands to communicate with a home networked appliance, but fail to teach or suggest where these SIP commands include

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instructions specific to the home networked appliance or where these SIP commands do not cause a session to be established to the appliance. The intention of Nuutinen and Moore would be to establish a telephony session. Arguably, Gawargy teaches the use of SIP to convey instructions without establishing a session. However, as just described, the obvious combination of Gawargy's teachings to Nuutinen and Moore is the use of SIP to communicate with an AS that is located in the telephony infrastructure and where these SIP commands contain instructions directed at enabling IN/AIN functionality. Nothing in Nuutinen, Moore, or Gawargy motivates one to combine Gawargy's teachings to Nuutinen and Moore to use SIP to convey appliance specific instructions to home networked appliances and to do so without establishing sessions with these home networked appliances, as amended claim 1 recites. Accordingly, the combination of Nuutinen, Moore, and Gawargy fail to teach or suggest amended claim 1.

Claims 3-4, 6-7, and 22 depend from claim 1 and are therefore novel and nonobvious in view of Nuutinen, Moore, and Gawargy for the same reasons as set forth above.

Amended independent claim 8 recites limitations similar to amended claim 1 and is therefore also novel and nonobvious in view of Nuutinen, Moore, and Gawargy. However, claim 8 also recites that the user agent server (UAS) processor connects by a local area network *to at least two appliances* and that the UAS processor has address mapping capability so as to direct commands to a selected one of these appliances. In other words, in accordance with applicants' invention, a UAS processor can be associated with more than one appliance and as such, requires a mapping capability to map a SIP command to the appliance as specified in the message. (Specification, page 7, lines 11-18; page 15, line 26 to page 16, line 4) Importantly, the original intention of SIP, including the teachings of Nuutinen and Moore as related to SIP, are such that a SIP UAS processor is associated with only *one* entity/device and as such, the UAS processor does not perform address mapping in order to further route a command.

Importantly, contrary to the Examiner's rejection, the combination of Nuutinen and Moore also fails to teach or suggest the UAS processor connecting *to at least two appliances* and that the UAS processor has address mapping capability. As described above, the combination of Nuutinen and Moore is the use of SIP to setup telephony sessions to home network devices. Again, the obvious combination of Nuutinen and Moore is a separate SIP UAS processor on the HFG for each home device and each UAS processor handling the SIP signaling for its specific device. Again, as the Examiner indicates on page 8 of the Office Action, the translator of the HFG is to "provide a mapping between the *communication protocols* used in the in-home network and the protocols used in the HFC network."

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However, such teachings fail to suggest extending the SIP UAS processor to correspond to multiple devices, as claim 8 recites.

Amended claim 13 recites that the SIP system of claim 1 includes the SUBSCRIBE and NOTIFY message types as identified in Instant Messaging, which limitations the Examiner indicates are taught by Nuutinen. In accordance with applicants' invention, the SUBSCRIBE and NOTIFY messages allow for asynchronous communications between a client and a networked appliance and in particular, allow a client to instruct an appliance to notify it when a given event occurs. (Specification, page 12, lines 8-12; page 25, line 22 to page 28, line 26). As discussed above, Nuutinen teaches the use of SIP to create, modify, and terminate multimedia sessions, which are all synchronous events. As such, Nuutinen fails to teach or suggest the use of SIP for asynchronous communications and thereby fails to teach or suggest claim 13.

Amended claim 23 recites limitations similar to claims 1 and 8 and is therefore novel and nonobvious in view of Nuutinen, Moore, and Gawargy for the same reasons as set forth above for claims 1 and 8. Amended claim 24 depends from claim 23 and is therefore also novel and nonobvious in view of the cited art.

The Examiner rejected priorly presented claim 12 as unpatentable, 35 USC 103(a), over Nuutinen, Moore, and Gawargy and further in view of Fox et al., U.S. patent 6,421,781, July 16, 2002 (hereinafter Fox). To expedite prosecution of this application, applicants have cancelled claim 12.

The Examiner rejected priorly presented claims 16-18 as unpatentable, 35 USC 103(a), over Nuutinen, Moore, and Gawargy and further in view of Geagan et al., U.S. patent 6,263,371, July 17, 2001 (hereinafter Geagan). Claims 16-18 depend from claim 1 and are therefore novel and nonobvious in view of the cited art for the same reasons as set forth above.

To further protect applicants' invention, applicants have added new claims 26 and 27, both of which depend from claim 1. Claim 26 recites limitations similar to claim 8, that the UAS processor is associated with two network appliances and includes an address mapping capability for directing commands to a selected one of these appliances. Claim 27 adds that the address mapping capability directs commands to both appliances. Again, the cited art, alone or in combination, fails to teach or suggest a SIP UAS processor being associated with multiple devices and as important, fails to teach or suggest a UAS processor directing the same command to multiple devices.

Since Nuutinen, Moore, Gawargy, Fox, and Geagan do not teach or suggest applicants' novel methods and systems alone or in combination as set forth in amended

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claims 1, 3-4, 6-9, 13, 16-18, and 22-24 and new claims 26-27, applicants submit that these claims are clearly allowable. Favorable reconsideration and allowance of these claims are therefore requested.

Applicants earnestly believe that this application is now in condition to be passed to issue, and such action is also respectfully requested. However, if the Examiner deems it would in any way facilitate the prosecution of this application, he is invited to telephone applicants' agent at the number given below.

A petition for a one-month extension of time is enclosed herewith.

Respectfully submitted,
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